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Report of the Human Development Report Office of the United Nations Development Programme

Note by the Secretary-General

The Secretary-General has the honour to transmit to the Statistical Commission the report of the Human Development Report Office of the United Nations Development Programme. The report is transmitted in accordance with a request of the Statistical Commission at its thirty-second session.[1] The Commission is requested to provide advice on the points of discussion contained in paragraphs 13 and 59.

* E/CN.3/2002/1.

[1] *Official Records of the Economic and Social Council, 2001, Supplement No. 4* (E/2001/24), para. 52 (d).

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Summary

In the analysis of human development, 29 countries lack basic data that are required for the human development index. Many more, including some large countries, lack other basic statistics. Where data do exist, quality is a major issue. Sources are improving but some policy areas, such as poverty and education, have very large data gaps. Other statistical issues that cut across most policy areas, such as purchasing power parities and demography, are also in need of urgent improvement in terms of quality, comparability and scope. The present report discusses these problems and suggests some priorities from the point of view of the *Human Development Report* as a user of statistics. It also outlines the steps taken in the *Human Development Report* to improve its use of the statistics that are available. Finally the conclusions are summarized and the views of the Statistical Commission are sought on the way forward.

The paper has seven sections: section 1 provides some background and describes the nature of the *Human Development Report* section 2 discusses some countries for which data are most lacking; section 3 discusses data quality; section 4 discusses policy areas where data are lacking; section 5 discusses some other statistical problems that cut across policy areas; section 6 describes some improvements in the use of statistics in the *Human Development Report*; and section 7 presents a short summary and conclusion.

I. Introduction

An indicator of the size of the problem

1. In the 2001 edition of the *Human Development Report*, 29 United Nations Member States are excluded from the human development index owing to lack of data (although a special addendum for 12 of the 29 countries was issued, in which some broad estimates were used). The index uses only very basic statistics (gross domestic product (GDP), purchasing power parities, enrolment, literacy and life expectancy), and alternative estimates are sought from other sources if one of the components of the index is missing. Bearing this in mind, the lack of data for 29 countries is indicative of a lack of data across a wide range of policy areas. The human development index and other composite indices in the *Human Development Report* captures only a few basic dimensions of human development but, even so, their data requirements are not fully met. Human development is a much broader concept, and the lack of data for the index is just the tip of an iceberg. There have been improvements in many parts of the world but the lack of data is still a serious handicap in those countries where information is needed most.

The *Human Development Report* is analytical

2. The primary purpose of the *Human Development Report* is to make a critical analysis of the state of human development and trends across the globe, including a specific theme each year (the theme in 2001 was new technologies and in 2002, governance). Data is therefore sought for as much of the globe as possible and for

many aspects of human development, from poverty, human rights and personal security to good governance.

3. The analysis of human development focuses on people rather than on the economy and, where possible, on results rather than inputs. There is also an increased consciousness that data are required not just for Governments and other decision makers, but are fundamental to the democratic debate.

4. The Human Development Report Office is committed to monitoring and promoting human development within and between countries and over time. The process of bringing together data from every region of the world and on all of the topics that relate to human development, permits a synoptic view of the availability of statistics and of some of the concepts that underpin them. In the present paper an attempt is made to highlight what the Office sees as some of the more urgent statistical needs that are not being met.

5. The *Human Development Report* has a high profile, is widely quoted and is therefore a significant source of information and analysis around the world. It is from this perspective, as users of statistics, that the need for more or better statistics is discussed herein.

Statistics are crucial

6. While the statistics needed for measuring and analysing human development are crucial, they are not unique to human development. The same data are needed for many other purposes.

7. The United Nations Development Programme (UNDP) does not have a statistics department. The Human Development Report Office does not collect data directly from countries but, rather, relies on other international institutions. It is fortunate that the colleagues in those institutions are very cooperative. The Office's major sources are listed in the annex to this paper.

Sources are improving

8. The Office expresses its appreciation for the statistics that are provided to it. Without them there would be no *Human Development Report* as we know it. The Office likewise acknowledges the remarkable progress that has been achieved in such areas as national accounts, poverty, income inequality, gender inequality, environment, informal sector activities, and so on. Credit is due to the United Nations, regional organizations, other international organizations and, of course, the countries themselves and their bilateral partners.

Categorizing some of the data problems

9. The problems will be looked at under four headings: first, in terms of countries for which there is a consistent lack of basic data; second, reference is made to some crucial issues of data quality; third, the problems will be looked at in terms of policy areas where data are lacking; and fourth, some statistical issues that cut across the boundaries of statistical sectors or policy areas will be examined.

Seeking help and advice from the Statistical Commission

10. Some international statistical problems from the perspective of the *Human Development Report* as a user of statistics are highlighted. The work on the millennium development goals for the General Assembly annual report on global and country-level monitoring and the data requirements of global conferences will provide a longer list of indicators. The present report highlights only a small number of specific areas, but also highlights a number of countries where quite basic data across many policy areas are lacking. Reference is mostly made to the lack of data, but also to many problems with the quality of the data that are available.

11. Of the long lists of actual or potential indicators, which should have priority? The Office would like to contribute to that debate, and would be grateful to the Statistical Commission for its views on these issues and, in particular, its views on the way forward.

II. Gaps in country coverage

12. As noted above, there are 29 countries for which it is not possible to obtain even some of the basic data required for the human development index, although a special addendum was issued for 12 of them, in which some broad estimates were used. Some of the countries, such as San Marino and Tuvalu, have populations of only a few thousand and cannot be expected to have the range of data of larger countries. But others on the list, including Afghanistan, Iraq, the Democratic Republic of Korea and Somalia, have populations of around 10 to 20 million (table 28 of the *Human Development Report* 2001 lists all of the 29 countries and provides some statistics on them).

13. For the gender-related development index basic data is available for 146 countries; for the gender empowerment index, for only 64 countries; and for the human poverty indices (HPI-1 and HPI-2), data is available for a total of only 117 countries (the current United Nations membership is 189).

14. The millennium development goals relate to poverty, hunger, education, gender equality, maternal health, child mortality, disease and environmental sustainability. In the *Human Development Report* 2001 we made a crude assessment of the progress made in the 1990s towards selected goals for which trend data are available. Annex table 1 shows the country and population coverage of this analysis. It gives another striking example of the inadequate coverage of basic data for global assessment, particularly in the area of poverty and education.

15. Mention of these countries does not indicate criticism of their efforts nor a lack of appreciation of their predicaments. In the paper before the Statistical Commission at its current session that discusses the data requests of global summit meetings (E/CN.3/2002/26) it is emphasized that, in order for data requests to be met, the capacities of the statistical systems of many countries would have to be much improved. The Human Development Report Office agrees with that sentiment.

16. National priorities for statistics must take into account national problems and national characteristics. For example, in some regions malaria is a serious problem and in other regions it is not. But many countries lack such basic data as GDP (purchasing power parity), school enrolment, literacy or life expectancy, and of course these are not the only data missing. More and better statistics are needed if

the human development status and trends of these countries is to be assessed. The gaps in some of the tables in the *Human Development Report* show that, in general, those with the lowest human development index also have the lowest number of relevant statistical series. In particular, many countries of sub-Saharan Africa (mostly least developed countries) lack much of the data needed for intelligent policy decision-making and public debate. They include such populous countries as Angola, Congo, Malawi, the Sudan and Uganda.

17. The road map towards the implementation of the United Nations Millennium Declaration (A/56/326 dated 6 September 2001) contains a special section entitled "Meeting the special needs of Africa" (it does not single out any other region). Apart from the special case of Eastern Europe over the past 10 years, sub-Saharan Africa is the only region that has seen a decline in its GDP per capita over the past 10 years. It has also seen a decline over the past 25 years (see table 11 of the *Human Development Report*, 2001).

18. In addition to dealing with data quality and gaps in the various statistical domains across the world, many least developed countries, especially those in sub-Saharan Africa, and some others, need concentrated help in building the capacity to provide the basic data required, not just by the *Human Development Report* and other international users, but by the countries themselves.

III. Data quality

19. In some areas there is a fine line between data quality and data gaps. Data may exist, but can be of such poor quality that they can serve to mislead, rather than inform. In some cases, the data provided to us are merely estimates, are out of date, or do not conform to any accepted definition.

20. Many discrepancies are also encountered between data series published by countries as compared to those published by international organizations. Some of the discrepancies are the result of adjustments made by the international agencies in order to make data comparable between countries, but some are owing to data being supplied by different national government offices or the international agency not having the latest data revisions.

21. An example of inconsistencies within countries is adult literacy in the Caribbean. In 1995, the literacy rate given for Belize in 1992 was 96 per cent. However, the Belize 1991 census indicated between 70 and 80 per cent, and the current estimate for 1997 is 75 per cent. One of the problems here is the tendency to blur the differences between "basic", "simple" and "functional" literacy. Similarly, literacy estimates derived from different types of surveys, or using different methodologies, can also lead to different results.

22. In other domains too, different sources within a country produce different estimates. For example, household consumption estimates derived from household budget surveys, are commonly different from the estimates in the national accounts, with the latter being more comprehensive. This becomes a quality issue only when the data are treated as though they were defined the same.

23. There also exist inconsistencies between countries. In comparing data between countries, it is essential that the norms and standards employed are much the same from one country to another. However, this is often not the case in such important

areas as access to safe water, access to health services and births attended by skilled health personnel.

24. With regard to inconsistencies over time, comparability is also important, but sources and methods are apt to change especially in developing countries. Poverty studies, for example, may depend on quite different surveys from one time period to another, so that any change in results is impossible to interpret.

25. Inconsistencies between internationally and nationally published statistics tend to undermine their utility and their credibility. Greater coordination at the national and international levels is essential.

26. Nevertheless, there will always be some inconsistencies and some variability in the quality of data. It is incumbent upon users like ourselves, and upon the international agencies that collect the data from countries, to validate the information as far as possible and to ensure that the metadata that accompany the published statistics include notes on any additional uncertainty.

IV. Policy areas where data are lacking

27. There are many policy areas in which links with human development are well established but where data, and even the concepts that are essential prerequisites for statistical indicators, are sparse. For example, there are many conceptual and data gaps in personal security, social exclusion and participation, equity in social areas other than income, gender disparity, informal sector activities, and in environmental sustainability.

28. However, even where the concepts are fairly well established such as in the domain of poverty there are still many data gaps. As noted above, because of the lack of basic data, the composite human poverty indices (HPI-1 and HPI-2) can be calculated for a total of only 117 countries.

29. Similarly, in education, many concepts are well established, but much of the data are poor or non-existent. In health, there are many input indicators but many fewer indicators of outcomes or results. In these and other domains, data quality is also a serious issue, as indicated above.

30. The following are examples of statistics from some of these areas:

(a) *Proportion of people below a given income level.* In the area of income poverty, the concepts are well developed and numerous, but basic data are still severely lacking. For some purposes, aggregate national statistics would be sufficient if they were available, but for addressing such issues as deprivation and inequality within societies data that are disaggregated to show, for example, the distribution of income by numbers of households and by household type, for instance, the age or the gender of the head of household, are needed. Average income per capita, or GDP per capita, are informative broad indicators of income levels, but countries vary greatly in their distribution of income. In addition, the distributions can change significantly over time. One widely used indicator of poverty for developing countries is the number or proportion of people living on $1 a day or less. However, for many developing countries, even this basic statistic is not known (see table 3 of the *Human Development Report*, 2001). Similarly, for developed countries, a basic measure of poverty is the proportion of people or

families with incomes below 50 per cent of the median household income. Again, even this basic statistic is not available for many developed countries (see table 4 of the *Human Development Report*, 2001). More and better statistics on the distribution of income between households or individuals is a high priority for the Office, in respect of both developed and developing countries.

(b) *School enrolment and literacy*. For the purpose of analysing human development, data is needed on educational attainment and on access to proper educational facilities, but the only data relating to access to educational facilities that are commonly available for many countries relate to gross enrolment. That is to say, it includes the numbers of pupils enrolled in school, by grade, without information on their age, nor information on whether or not they actually attend school, nor whether the schools can offer proper education facilities. Such estimates are often poor indicators of school attendance. It should not be unrealistic to ask for net enrolment, namely, what proportion of each age group of children are enrolled in school. For monitoring the millennium development goals, the indicators for education are net primary enrolment, children reaching grade 5 (the end of primary level) and youth literacy. In gender inequality, the indicators are the ratios of girls to boys in gross enrolment at primary and secondary levels and male and female youth literacy. For net primary enrolment and children reaching grade 5, trend indicators are available for only 39 per cent of the world's population (excluding high-income member countries of the Organisation for Economic Cooperation and Development), as shown in annex table 1. The balance sheet of human development in terms of some of the millennium development goals is given on pages 21 to 25 of the *Human Development Report*, 2001. Literacy measures should reflect comparative educational attainment, but they often do not because they are inconsistent between countries. However, some countries now have more meaningful measures of "functional literacy", mainly through the International Adult Literacy Surveys. Even with such surveys there are some difficulties with comparability, but they are nevertheless more comparable than the traditional estimates of literacy. The indicators for education in the millennium development goals are also listed among the indicators required for United Nations summit meetings. In the paper before the current session of the Statistical Commission, entitled "An assessment of the statistical indicators derived from United Nations summit meetings" by the Friends of the Chair (E/CN.3/2002/26), these indicators are given the highest status in the hierarchy of indicators.

(c) *Victims of crime*. Prevalence of crime, fear of crime and confidence in the rule of law are important elements in personal security and human rights, but it is notoriously difficult to compare crime and justice statistics between countries, or even over time within countries, because of the way countries classify crimes (often related to sentencing policies) and the vagaries of crime reporting. Even within a country, an increase in the number of crimes reported of a particular type, does not necessarily relate to a change in the number of such crimes, but may relate to a change in the law or in attitudes to such criminal activity and the likelihood that the police will deal with it. The International Crime Victim Survey is an international programme of standardized surveys in which random samples of people are asked about their experiences with crime, whether or not the crimes were reported and their experience with the police and their feelings of safety. The surveys are coordinated by the United Nations Interregional Crime and Justice Research Institute. The project began in 1989 and, since then, there have been 145 surveys in

71 countries. It is only through such surveys that information can be derived that is, first, comparable internationally and second, directly relevant to the people who are victims of crime, or who live in fear of becoming victims of crime. Thus far, however, they have been undertaken in only about one third of the countries of the world, and there are thus no comparable data for the other two thirds. This is an area where the way in which the data gaps can be filled is clear. Some data from the surveys are given in table 20 of the *Human Development Report*, 2001.

(d) *Good governance and human rights*. Governance is the theme of the *Human Development Report*, 2002, and human rights was the theme in the *Report* for 2000. Both areas are intrinsically difficult to quantify, largely because there is little agreement on the concepts and the standards, and because questions such as how many prisoners are tortured, how free are the news media, or how widespread is corruption are unlikely to be answerable in terms of official statistics. No international organization has specific responsibility for governance. The World Bank has done a lot of work in recent years in trying to establish objective measures of governance (http://www1.worldbank.org/publicsector/indicators.htm). Other, mainly non-governmental, international organizations and researchers have also done conceptual work and published some measures in recent years. But the data vary in their time scales and their country coverage and, where they provide quantitative scores, they are often based on qualitative data. The Inter-Parliamentary Union also provides some data on political participation and structures of democracy. The report of the Friends of the Chair entitled "An assessment of the statistical indicators derived from United Nations summit meetings" (E/CN.3/2002/26) notes that for new policy areas such as human rights and good governance, no established indicators exist. In such areas, the development of statistical indicators will take time and the process needs to involve statisticians and policy officials. The report goes on to recommend that the Statistical Commission establish a group to develop indicators in those areas. The Human Development Report Office is willing to participate in research in the areas of human rights and governance.

V. Statistical issues that cut across policy areas

31. There are many statistical issues that cut across policy areas. In general terms, data quality, as discussed above, is the main concern. Comparability of statistics (within countries, from country to country and over time) is a prime need for any analysis of the state of human development and trends across the globe. Despite advances in international standards, and their increased adoption in many areas, there are still very significant gaps.

32. An important issue for us too is the need for data that are used to convert raw statistics into more comparable or more meaningful information. Two examples are discussed here. One example is purchasing power parities and another is population estimates and projections.

Purchasing power parities

33. In order to compare almost any data expressed in money terms between one country and another, it is necessary to convert local currencies into a common currency, so that statistics can be compared in "real" terms. That is to say, converted

into terms that allow the purchasing power of the sums to be compared. The purchasing power parity tables that are derived from the International Comparison Programme are designed to provide the necessary converters.

34. *Human Development Reports* have been using purchasing power parities from the first edition in 1990. For example, in the human development index, GDP per capita is calculated using purchasing power parity to convert GDP estimates. Purchasing power parities have been used increasingly over the last 10 years, by the Human Development Report Office and by many others. In the *Human Development Report*, 2001 purchasing power parities are used systematically to compare economic and financial data across countries.

35. The conceptual case for using purchasing power parity is clear, and there is no viable alternative for most purposes, but there are two practical problems. One is that the World Bank has been able to estimate purchasing power parity directly (using special price survey data) for only 118 of the 220 distinct economies around the world. For other countries they have had to use regression techniques on the assumption that economic characteristics and structures of surveyed countries are similar to non-surveyed countries.

36. The second problem with purchasing power parity is the quality of the input data and of the results. It is intrinsically difficult to estimate price relatives over time or over space, so even with better input data, the results would still be subject to wide margins of error, especially when comparing countries with very different buying habits and levels of income. Nevertheless, it is recognized that the purchasing power parity could be much improved with better inputs and improved methodology.

37. The importance of purchasing power parity in economic and socio-economic analysis underlines the need for improvements in such data. This has been recognized and the World Bank, the Organisation for Economic Cooperation and Development and Eurostat have been leading the international effort to provide the necessary increase in institutional and financial support. We also support this initiative.

Population statistics

38. The *Human Development Report* uses some demographic data as direct measures of human development. These include life expectancy, infant mortality, fertility and dependency ratios. But the demographic data that the Office uses the most are population estimates and projections. These data are used in all the areas of human development, often as denominators or as weights for aggregation.

39. Our dependence on population data in so many areas emphasizes some of the inconsistencies, particularly between the estimates used by the various international agencies upon which we rely. For example, in the human development index the GDP per capita of the World Bank (which uses one set of population data) is used, but there is a different set of population estimates for the other human development index components. We could standardize on one set of population estimates, but then our published "per capita" data would be inconsistent with that published by the agencies that supply the data.

40. The impact of HIV/AIDS on population estimates and projections has added to the confusion. Many countries have approached the Office to ask about the effects

on life expectancy figures and the methodology used. But there does not yet appear to be agreement between international agencies.

41. The above-mentioned Friends of the Chair report gives "highest priority" status to estimates of population by age.

VI. Recent improvements to the statistics in the *Human Development Report*

42. So far in the present paper, the lack of statistics and the quality of statistics in some areas have been discussed. In this section, we describe our recent efforts to improve our use of the statistics that already exist, in the light of the report of the Friends of the Chair report (E/CN.3/2001/18) that was discussed in the Statistical Commission in 2001.

43. It has already been noted above that purchasing power parities are now used more systematically throughout the report.

44. There is now regular engagement with the international agencies that the Office relies upon for data. This includes visiting their offices around the world to discuss the possibilities and agreeing with them in advance on what data we are likely to need.

45. We also engage more closely with the international statistical community collectively, through the Statistical Commission, and through the Subcommittee on Statistics of the United Nations System Chief Executives Board for Coordination (formerly the Administrative Committee on Coordination), which is attended by the heads of statistics of the agencies.

46. The Office has also reviewed the general principles in the use of statistics in the *Human Development Report* both in the analytical chapters and in the statistical tables.

47. The Office also ensures that all data sources are fully referenced and notes where there may be any additional uncertainty about the data.

48. There is now a Statistical Advisory Panel of expert statisticians and economists that meets to advise the Office on various aspects of statistics in the *Human Development Report*.

49. The Office has also been fortunate enough to have peer reviewers go over the statistics in the analytical chapters and the tables. This has been an important backstopping process in a report that uses so many statistics.

50. In addition, the Senior Statistical Adviser of the Office is collaborating on all aspects of the use of statistics in the *Human Development Report*.

51. The results are positive, but it is for the users of the *Human Development Report* to judge whether the extra efforts made have been successful in achieving the major improvement being sought. In any case, the efforts will continue unabated with a view to effecting improvement.

VII. Conclusion

52. The present report highlights some of the most severe international statistical problems as seen from the perspective of the Human Development Report Office. We have referred to both the lack and quality of data that are available. In particular, the Office would emphasize the following needs: from the long lists of actual or potential indicators, which should have priority? The Office would like to contribute to that debate and would be grateful to the Statistical Commission for its views on these issues, and in particular, on the way forward.

53. In addition to dealing with data quality and gaps in the various statistical domains across the world, many countries of sub-Saharan Africa (mostly least developed countries) and some others need concentrated help in building the capacity to provide the basic data required by the *Human Development Report* and other international users and by the countries themselves.

54. Inconsistencies between internationally and nationally published statistics tend to undermine their utility and their credibility. Greater coordination at the national and international levels is essential.

55. There will always be some inconsistencies and some variability in the quality of data. It is incumbent upon users such as the Office, and upon the international agencies that collect the data from countries, to validate the information as far as possible and to ensure that the metadata that accompany the published statistics includes notes on any additional uncertainty.

56. The Office has highlighted the increasing demand for better statistics in basic areas of human development, such as poverty, income inequality and education, as well as the urgent needs for both conceptual and empirical development in pressing policy areas, such as personal security, human rights, governance, social equality and participation and environment. We also stressed the need for improving the international conversion systems, especially the purchasing power parities, which are crucial for global assessment.

57. The need for data is not unique but are shared by many others. The new impetus of the millennium development goals and the data requirements of global summits are adding to the drive for more and better statistics. We would be pleased to hear from the Statistical Commission their views on these issues and, in particular, on possible solutions.

Annex

Major sources of statistics used in the *Human Development Report*

Carbon Dioxide Information Analysis Centre

Food and Agriculture Organization of the United Nations

International Institute for Strategic Studies

International Labour Organization

International Monetary Fund

International Telecommunication Union

Inter-Parliamentary Union

Join United Nations Programme on HIV/AIDS (UNAIDS)

Luxembourg Income Study

Organisation for Economic Cooperation and Development

Stockholm International Peace Research Institute

United Nations Children's Fund

United Nations Conference on Trade and Development

United Nations Educational, Scientific and Cultural Organization

Office of the United Nations High Commissioner for Refugees

United Nations Interregional Crime and Justice Research Institute

United Nations Multilateral Treaties Deposited with the Secretary-General (United Nations Treaty Collection)

United Nations Population Division

United Nations Statistics Division

World Bank

World Health Organization

World Intellectual Property Organization

Annex table 1.
Indicators used in assessment of progress towards selected millennium development goals (*Human Development Report*, 2001)

	Indicator	*No. of countries assessed*[a]	*Percentage of world population covered*[b]
Extreme poverty	Average annual GDP per capital growth rate, 1990-1999, and Gini index, 1990-1999	85	77
Hunger	Percentage of people undernourished, 1990/92 and 1996/98	86	73
Safe water	Percentage of people with access to improved water sources, 1999	133	82
Universal education	Net primary enrolment ratio, 1990 and 1995-1997	58	39
	Percentage of children reaching grade 5, 1995 cohort	83	39
Gender equality	Ratio of girls to boys in school (girls' gross enrolment ratio to boys') 1990 and 1995-1997		
	Primary	88	63
	Secondary	85	64
Maternal mortality	Maternal mortality ratio (per 100,000 live births), 1995	145	85
Infant and child mortality	Infant mortality rate (per 1,000 live births), 1990 and 1999	159	85
	Under-five mortality rate (per 1,000 live births), 1990 and 1999	159	85

Source: United Nations Development Programme 2001. *Human Development Report*, 2001, technical note table 3.1, p. 247.

[a] Excluding high-income Organisation for Economic Cooperation and Development countries.

[b] Refers to the share of world population.